

RatingsDirect®

New York State Dormitory Authority Columbia University Trustees; CP; Private Coll/Univ - General Obligation

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New York State Dormitory Authority Columbia University Trustees; CP; Private Coll/Univ - General Obligation

Credit Profile

US\$180.0 mil new money bnds (Columbia Univ Trustees) ser 2016A dtd 05/15/2016 due 10/01/2046

Long Term Rating AAA/Stable New

US\$169.285 mil rfdg bnds (Columbia Univ Trustees) ser 2016B dtd 05/16/2016 due 10/01/2031

Long Term Rating AAA/Stable New

US\$82.23 mil rfdg bnds (Columbia Univ Trustees) ser 2016 dtd 05/15/2016 due 10/01/2022

Long Term Rating AAA/Stable New

Dorm Auth of the St of New York, New York

Columbia Univ, New York

New York State Dorm Auth (Columbia University)

Long Term Rating AAA/Stable Affirmed

Rationale

Standard & Poor's Ratings Services assigned its 'AAA' long-term rating to the New York State Dormitory Authority's series 2016A and 2016B bonds to be issued for Columbia University (Columbia).

In addition, Standard & Poor's affirmed its 'AAA' long-term ratings on the New York State Dormitory Authority and New Jersey Economic Development Authority's existing bonds issued for Columbia University and on the taxable debt issued directly by the Trustees of Columbia University in the City of New York. The outlook on all these ratings is stable.

At the same time, Standard & Poor's affirmed its 'A-1+' short-term rating on variable rate demand debt and commercial paper (CP) issued for the university by the authorities and the taxable CP program issued directly by the university.

We assessed Columbia's enterprise profile as extremely strong, characterized by exceptional demand as measured by selectivity and matriculation rates, and low tuition discount rate compared with peers. We assessed Columbia's financial profile as very strong, characterized by healthy full accrual operating performance, and solid available resources compared with operating expenses and pro forma debt. Combined, we believe these credit factors lead to an indicative stand-alone credit profile of 'aa+'. As our criteria indicate, the final rating can be within one notch of the indicative level. In our opinion, the 'AAA' rating on Columbia's bonds better reflects the significant cash and investments compared with pro forma debt.

Columbia's bonds are eligible to be rated above the sovereign due to a moderate sensitivity to country risk. The university's revenues are the sole sources of security on the bonds. Furthermore, the institutional framework in the U.S.

is predictable with private higher education institutions such as Columbia having significant autonomy, independent treasury management, and no history of government intervention. Financial flexibility is demonstrated by the large endowment market value, which is invested globally, and the low relative debt levels.

The 'A-1+' short-term rating reflects our view of the university's ability to provide liquidity to support the purchase price of bonds that have been tendered and any commercial paper (CP) that has not been remarketed. In our opinion, the university has in place robust liquidity to cover CP and variable-rate demand obligations (VRDOs). As of June 30, 2015, Columbia had approximately \$177 million of VRDOs and CP outstanding. Columbia has a taxable CP program with total authorization for \$150 million, none of which was outstanding as of June 30, 2015. Columbia has identified \$895 million of same-day unencumbered securities and dedicated lines of credit as of June 30, 2015, available to cover an estimated \$327 million of outstanding VRDO's and authorized taxable CP, providing solid coverage. Columbia has two lines of credit in place for \$100 million each. These credit lines are available to support any liquidity needs with a failed remarketing.

The 'AAA' rating reflects our assessment of Columbia's strengths:

- Impressive demand, excellent student quality, and increasingly competitive admissions;
- Ample endowment;
- Diverse revenue stream, effective long-range planning, and budgeting practices;
- Track record of robust fundraising;
- Exceptional operating performance in recent years; and
- Continued strength in sponsored research supported by the medical center.

The 'AAA' rating reflects our assessment of Columbia's weaknesses:

- Adequate available resources relative to expenses, compared with category medians;
- Plans for additional capital spending and future debt that could dilute future available resources ratios if healthy growth does not continue through the period of issuance.

A general obligation of the university secures all debt. Management plans to use proceeds from the series 2016A bonds to fund a portion of various capital projects and fund costs of issuance. Management plans to use proceeds from the series 2016B bonds to refund various series of outstanding debt and pay costs of issuance.

Columbia University is a privately endowed, nonsectarian, nonprofit institution of higher education. Today, Columbia is one of the largest private institutions of higher education in the U.S., with a full-time faculty of approximately 3,858 and a student population of 30,304. There are approximately twice as many graduate and professional students at Columbia than undergraduates.

The university offers bachelor's degrees in 93 subject areas, master's degrees in 224 subject areas, doctoral degrees in 88 academic fields, and 72 certificate programs. Professional schools include medical; law; engineering and applied science; arts and sciences; and business. Columbia has two campuses, both in Manhattan. The main campus is located in Morningside Heights, and the other primary campus, the Medical Center campus, is located in Washington Heights.

Outlook

The stable outlook reflects Standard & Poor's expectation that the university's healthy demand and financial performance will continue at current levels or better. Standard & Poor's believes Columbia's financial resources are consistent with the rating category and will continue to grow substantially to accommodate planned debt issuances during the next two years, producing metrics that remain consistent with category medians.

Downside scenario

Although unlikely during the next two years given the overall robust financial profile, we could consider a negative outlook or lower rating if operating performance or financial resources deteriorate substantially from current levels, particularly due to the plans for greater capital spending and debt issuance, such that levels become more consistent with medians for a lower rating.

Enterprise Profile

Industry risk

Industry risk addresses the higher education sector's overall cyclical and competitive risk and growth by applying various stress scenarios and evaluating barriers to entry, levels and trends of profitability, substitution risk, and growth trends observed in the industry. We believe the higher education sector represents a low credit risk when compared with other industries and sectors.

Economic fundamentals

In our view, the university has good geographic diversity. Only 20% of students are New Yorkers, and the remainder comes from across the U.S. and around the world from nearly 100 countries. As such, our assessment of Columbia's economic fundamentals is anchored by the U.S. GDP per capita.

Market position and demand

Columbia is an exceptionally selective university, and admission trends continue to be positive. Freshmen applications at Columbia College remained robust in fall 2015, fueled in part by its status as a premier academic institution located in New York City. Columbia College accepted only 6% of applicants for admission in fall 2015, which is one of the strongest selectivity rates in our rated universe, and down from an already impressive 9% for fall 2009. Matriculation rates have increased to an impressive 63% for fall 2015 from an already robust 61% for fall 2009, which is a sign of the university's self-selecting student body and competitive strength. Undergraduate student quality is exceptional, in our view, with an average SAT score of 1,490.

Columbia's professional schools are also highly competitive. For fall 2015, Columbia enrolled 22,114 graduate and professional students. Columbia's College of Physicians and Surgeons, College of Dental Medicine, Graduate School of Arts and Sciences, and Business School are among the most selective in the nation.

Columbia has made significant strides in fundraising, and completed its most recent campaign on Dec. 31, 2013, exceeding its \$5 billion goal by raising \$6.1 billion. Columbia expects to use the majority of the campaign proceeds to fund the addition of professorships and scholarships, as well as the construction and renovation of facilities. Fiscal

2015 was a solid fundraising year, and the university recorded 553 million of cash gift income (a non-GAAP measure), up from \$470 million for fiscal 2014. In our view, Columbia's fundraising success is an important credit strength because it has contributed to substantial growth in financial resources.

Management

The management team at Columbia has been in place for several years, and the long-serving president will continue to serve through 2022. In our view, the management team's continuity allows for overall credit stability. Its robust investment, financial, and enterprise risk management practices allow for effective university-wide operational management. Columbia Investment Management Company (CIMC) has an extensive due diligence process led by its chief operating officer, who is responsible for information technology and risk management. Due diligence procedures include multiple visits and discussions with investment managers, back-office visits, reference and background checks, and review of legal documents, all of which we view as best practices. The university prepares full accrual statements on a quarterly basis for internal use, which we view as a solid practice.

Financial Profile

Financial management policies

The university has formal policies for endowment, investments, and has a governance framework overseen by its board of trustees for reserve and liquidity and debt management practices. Columbia meets standard annual disclosure requirements and operates according to a five-year strategic plan. The financial policies assessment reflects our opinion that, while there may be some areas of risk, the organization's overall financial policies are not likely to negatively affect its future ability to pay debt service. Our analysis of financial policies includes a review of the organization's financial reporting and disclosure, investment allocation and liquidity, debt profile, contingent liabilities, and legal structure and comparison of these policies to comparable providers.

Financial performance

We consider Columbia's diverse revenue stream to be a credit strength, with tuition and fees accounting for the largest portion (33%) of fiscal 2015 adjusted operating revenue. Other major revenue sources of fiscal 2015 revenue include governmental grants and contracts (17%), patient care revenue (23%), endowment and investment income (12%), and private gifts and contracts (5%). The university has a history of generating ample operating surpluses, even during the economic recession, which we view positively. On a full accrual basis, Columbia produced a surplus of \$284.5 million, with robust patient care revenue and net tuition revenue growth more than offsetting the decrease in research revenue. We expect that research revenue will grow incrementally in fiscal 2016 and beyond, particularly once the ongoing project to construct the Mortimer B. Zuckerman Mind, Brain Behavior Institute at the Jerome L. Green Science Center opens. Patient care revenues have been buoyed by the medical faculty's increased productivity, as well as physician recruitment and market share growth.

Columbia does not rely heavily on endowment income, which we view as an operating strength. In fiscal 2015, Columbia recorded unrestricted endowment spending for operations of approximately \$522 million.

Available resources

In our view, the university's available resources have improved to levels we consider solid on an overall basis when compared with relevant medians in fiscal 2015 from levels we considered low for the rating in fiscal years 2009 and 2010. Available resources (as measured by expendable resources) were healthy at \$8.7 billion as of June 30, 2015, equal to what we view as a low 211% of operating expenses, ample 525% of outstanding debt and solid 473% of pro forma debt when \$180 million of additional series 2016A bonds is included. Total cash and investment as of June 30, 2015, equaled a stronger \$11.3 billion, equal to a robust 615% of pro forma debt, which we view as an important credit factor.

CIMC, a New York limited-liability company formed by Columbia in 2003, manages the university's endowment assets under the supervision of the Committee on Finance of the university's Board of Trustees. The net 10-year performance of the managed asset component of the endowment has been in the 97th percentile. The fiscal 2015 endowment return was positive at 7.6%, which places it within the top quartile of its peer group. The market value of the managed assets increased to \$9.2 billion in fiscal 2015, substantially above the \$6.5 billion level reached at fiscal year-end 2010. As of June 30, 2015, the university invested 30% of its endowment in hedge funds, 26% in global equity, 21% in private equity, 16% in real assets, 3% in fixed income, and 3% in net cash. Management has no immediate plans to restructure its endowment portfolio in a significant manner.

Management indicates that there is sufficient liquidity in the endowment to fund the endowment payout rate and capital calls. As of June 30, 2015, the university had \$2.4 billion of unfunded capital calls, and could liquidate nearly 50% of managed assets in the endowment within one year.

Debt and contingent liabilities

The university's total debt—counting bonds, capital leases, and notes—was \$1.8 billion as of June 30, 2015, including the full authorized taxable CP program. Columbia remains conservative in its use of variable-rate debt compared with many of its peers, which we view as a credit strength. Assuming the full amount of CP outstanding, the university had 18% variable rate debt as of June 30, 2015. Incorporating Columbia's outstanding swap, its debt portfolio was 7% variable rate, and 93% fixed rate if taxable CP is fully drawn. Upon issuance of the series 2016A and 2016B bonds, total pro forma debt, including the full authorized taxable CP program will be \$1.99 billion.

The university's pro forma debt service is not level, with a pro forma debt burden that totaled 6% of fiscal 2015 operating expenses. We expect that the university will refinance or pay bullet maturities with cash flows; therefore, we assumed a smoothed pro forma maximum annual debt service equal to a low 2.6% of adjusted operating expenses in fiscal 2015.

The university entered into a swap contract with a notional amount of \$200 million, or 10% of its pro forma debt, with Goldman Sachs Mitsui Marine Derivative Products. The mark to market valuation of the swap was a negative \$68.2 million as of June 30, 2015. The university is not required to post collateral unless the rating falls to 'AA-' and the mark to market value exceeds negative \$20 million. In our view, the contingent liability risk exposure from the swap is fully mitigated by Columbia's ample same-day liquidity.

Columbia University, N.Y. Financial Statistics

	--Fiscal year ended June 30--					Medians for 'AAA' rated private colleges and universities
	2016	2015	2014	2013	2012	2014
Enrollment and demand						
Headcount	30,304	29,870	29,250	28,824	28,221	MNR
Full-time equivalent	26,586	26,258	25,658	25,055	24,563	11,628
Freshman acceptance rate (%)	6.1	6.9	6.9	7.4	7.0	11.0
Freshman matriculation rate (%)	63.1	62.2	61.2	59.9	60.4	52.8
Undergraduates as a % of total enrollment (%)	26.7	26.9	27.2	28.7	28.7	49.3
Freshman retention (%)	99.0	99.0	99.0	99.0	99.0	98.0
Graduation rates (five years) (%)	N.A.	95.0	94.0	95.0	95.0	94.5
Income statement						
Adjusted operating revenue (\$000s)	N.A.	4,430,055	4,188,495	4,001,165	3,894,468	MNR
Adjusted operating expense (\$000s)	N.A.	4,145,584	3,933,663	3,775,279	3,724,010	MNR
Net operating income (\$000s)	N.A.	284,471	254,832	225,886	170,458	MNR
Net operating margin (%)	N.A.	6.86	6.48	5.98	4.58	MNR
Change in unrestricted net assets (\$000s)	N.A.	297,310	621,576	444,330	(102,482)	MNR
Tuition discount (%)	N.A.	26.8	27.0	27.6	27.6	39.6
Tuition dependence (%)	N.A.	29.0	29.0	28.5	27.9	MNR
Student dependence (%)	N.A.	32.6	32.5	31.9	31.0	MNR
Healthcare operations dependence (%)	N.A.	23.2	22.4	22.2	22.3	MNR
Research dependence (%)	N.A.	17.0	18.4	20.0	22.0	MNR
Endowment and investment income dependence (%)	N.A.	11.8	11.9	11.6	10.8	MNR
Debt						
Outstanding debt (\$000s)	N.A.	1,664,435	1,546,820	1,599,323	1,650,321	1,452,880
Proposed debt (\$000s)	N.A.	180,000	N.A.	N.A.	N.A.	MNR
Total pro forma debt (\$000s)	N.A.	1,844,435	N.A.	N.A.	N.A.	MNR
Pro forma MADS	N.A.	108,050	N.A.	N.A.	N.A.	MNR
Current debt service burden (%)	N.A.	2.78	3.05	3.29	3.51	4.20
Current MADS burden (%)	N.A.	3.25	3.36	3.50	3.55	MNR
Pro forma MADS burden (%) (smoothed)	N.A.	2.61	N.A.	N.A.	N.A.	MNR
Financial resource ratios						
Endowment market value (\$000s)	N.A.	9,639,065	9,223,047	8,197,880	7,654,152	8,362,082
Cash and investments (\$000s)	N.A.	11,338,963	10,850,594	9,836,197	8,874,938	MNR
Unrestricted net assets (\$000s)	N.A.	6,024,449	5,727,139	5,105,563	4,661,233	MNR
Expendable resources (\$000s)	N.A.	8,731,587	8,552,361	7,693,615	7,090,519	MNR

Columbia University, N.Y. Financial Statistics (cont.)

	--Fiscal year ended June 30--					Medians for 'AAA' rated private colleges and universities
	2016	2015	2014	2013	2012	2014
Cash and investments to operations (%)	N.A.	273.5	275.8	260.5	238.3	873.2
Cash and investments to debt (%)	N.A.	681.2	701.5	615.0	537.8	826.7
Cash and investments to pro forma debt (%)	N.A.	614.8	N.A.	N.A.	N.A.	MNR
Expendable resources to operations (%)	N.A.	210.6	217.4	203.8	190.4	676.6
Expendable resources to debt (%)	N.A.	524.6	552.9	481.1	429.6	642.7
Expendable resources to pro forma debt (%)	N.A.	473.4	N.A.	N.A.	N.A.	MNR
Average age of plant (years)	N.A.	12.1	11.8	11.7	10.3	11.6

N.A.--Not available. MNR--median not reported. Total adjusted operating revenue = unrestricted revenue less realized and unrealized gains/losses and financial aid. Total adjusted operating expense = unrestricted expense plus financial aid expense. Net operating margin = 100 times (net adjusted operating income/adjusted operating expense). Tuition dependence = 100 times (gross tuition revenue/adjusted operating revenue). Current debt service burden = 100 times (current debt service expense/adjusted operating expenses). Current MADS burden = 100 times (maximum annual debt service expense/adjusted operating expenses). Cash and investments = cash + short-term and long-term investments. Adjusted UNA = Unrestricted net assets + unrestricted net assets of the foundation. Average age of plant = accumulated depreciation/depreciation and amortization expense.

Related Criteria And Research

Related Criteria

- USPF Criteria: Commercial Paper, VRDO, And Self-Liquidity, July 3, 2007
- USPF Criteria: Contingent Liquidity Risks, March 5, 2012
- General Criteria: Methodology: Not-For-Profit Public And Private Colleges And Universities, Jan. 6, 2016
- Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions, Nov. 19, 2013

Ratings Detail (As Of April 4, 2016)

Columbia University CP

Short Term Rating A-1+ Affirmed

Columbia Univ Trustees, New York

Columbia Univ, New York

Columbia Univ Trustees (Columbia University)

Long Term Rating AAA/Stable Affirmed

Dorm Auth of the St of New York, New York

Columbia Univ, New York

New York State Dorm Auth (Columbia University)

Long Term Rating AAA/A-1+/Stable Affirmed

New Jersey Econ Dev Auth, New Jersey

Columbia Univ, New York

Ratings Detail (As Of April 4, 2016) (cont.)

New Jersey Econ Dev Auth (Columbia University) VRDO ser 2002

Long Term Rating

AAA/A-1+/Stable

Affirmed

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